2. Pelvic bones not comnected with poctoral arch ; ventrals without spine, with 5) or 6 rays; snout tubiform; first vertebra very elongate, formed by the fusion of several.
Isolated dorsal spines; body scaly
3. Aulostomutide.

No dorsal spines; body naked
6. Fistulariidue.
13. Mouth toothless ; snout tubiform ; two short dorsal fins, the first with a few spines; rentral fins with 3 to 5 rays; anterior vertebre elongate.
Body covered with bony shields and small rough scales
7. Centriscide.

Body completely cuirassed by bony shields which are fused with the endoskeleton
8. Amphisilide.
III. Lophorranchit. Preoperculum absent; symplectic much elongate ; branchial apparatus more or less reduced; gill-lamelle reduced in number and enlarged, forming rounded lobes; posttemporal simple, immovably attached to the skull; mouth toothless, at the end of a tubiform snont ; body covered with bony plates.
Two dursal fins; rentral fins present, with 7 rays; gill-openings wide; exoskeleton of large star-like plates
9. Solenostomide.
A single dorsal fin; no ventral fins; gill-
openings very small; exoskeleton in the
form of rings
10. Symgnathita.
IV. Ifpostomides. Preoperculum and symplectic absent; gills pectinated; mouth inferior, toothless; body entirely covered with bony plates; ventral fin with 2 or 3 rays
11. Pegusina.

## XIX.-Descriptions of Two new South-American Apodal Batrachians. By G. A. Boulenger, F.R.S.

## Cacilia Thompsoni.

Teeth very large in front, 6 or 7 in the upper jaw, 15 or 16 in the lower jaw, 14 vomero-palatines on each side ; 8 small inner mandibular teeth. Snout rounded, very prominent, as long as the distance between the eyes, which are very indistinct ; tentacle on the lower surface of the snout, nearer the edge of the mouth than the nostril. Body cylindrical, very elongate, its diameter 90 times in the total length ; 212 circular folds, most of them narrowly interrupted on the dorsal and ventral regions, the last 36 complete and
with incomplete intermediate ones. Blackish, speckled with yellowish on the sides.

Total length 1170 millim. ; greatest diameter of body 13.
A single specimen from Villeta, Colombia, altitude 350 J feet, collected by Mr. Kay Thompson.

This species is allied to C. gracilis, Shaw, but differs in the larger teeth and in the lower position of the tentacle.

## Rhinatrema peruvianum.

Teeth small ; both rows of mandibular teeth well developed. Snout rounded, scarcely prominent, a little shorter than the distance between the eyes, which are distinguishable. Body rather strongly depressed, with 379 very distinct complete circular folds, 28 of which are on the tail. Anal opening longitudinal. Tail strongly compressed, rounded at the end, a little longer than the head. Uniform dark brown, anal region whitish.

Total length 250 millim. ; greatest diameter of body 12.
A single specimen from the Marcapata Valley, E. Peru, collected by Mr. G. Ockenden.
'This species is intermediate between $R$. bivittatum, Cuv., from Cayenne, and $R$. bicolor, Blgr., from Colombia and Ecuador. It differs from the first in the longer compressed tail *, from the second in the more obtuse tail and the more numerous annuli on the body, from both in the absence of a yellow lateral band.

## XX.-Description of a new Cyprinodontid Fish from Eastern P'eru. By G. A. Boulenger, F.R.S.

## Orestias tirapatce.

Body compressed, its depth equal to the length of the head, which is $3 \frac{3}{4}$ to 4 times in the total length. Width of head equal to its depth ; crown slightly convex; snout obtuse, as long as the eye ; mouth small, cleft to the level of the lower border of the eye; lower jaw not projecting beyond the upper; teeth very small; eye supero-lateral, its diameter $3 \frac{2}{3}$ to 4 times in length of head, $1 \frac{1}{3}$ to $1 \frac{1}{2}$ in interocular width; scales on head imbedded in the skin, which shows very

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[^0]:    * My collearue Dr. F. Mocquarl, of the Paris Museum, has kindly supplied me with the following measurements of the type specimen:Head (to occiput) 9 millim. ; length of tail 2 ; vertical diameter of tail (at base) 2.75 ; horizontal diameter of tail (at base) $3 \div 5$.

